

ASARCO

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Linda Jacobson
RCRA Project Manager
US EPA Region VIII
8ENF-T
999 18th Street, Suite 300
Denver, Colorado 80202-2466

May 10, 2005

SENT BY CERTIFIED MAIL
RETURN RECEIPT REQUESTED

**CONSENT DECREE
CIVIL ACTION NO. CV 98-3-H-CCL
EAST HELENA SITE
WORK PERFORMED IN APRIL 2005
PROGRESS REPORT #84**

Dear Ms. Jacobson:

On May 5, 1998, Asarco Incorporated (Asarco) and the United States Environmental Protection Agency (EPA) entered into a Consent Decree (Decree) to further the objectives of the Resource Conservation and Recovery Act (RCRA) and the Clean Water Act (CWA). Section XI of the Decree (Reporting: Corrective Action) requires Asarco to submit certified monthly progress reports to EPA which discuss the actions taken by Asarco in achieving compliance with the Decree. The reports are to be submitted to EPA no later than the twentieth (20th) day of the following month. The following describes only those activities that have occurred or are related to projects performed during April 2005. The historical actions taken by Asarco in achieving compliance with the Decree are contained in previous monthly progress reports.

a. Describe the actions, progress, and status of projects which have been undertaken pursuant to Part VII of the Decree;

The Phase I RFI Site Characterization draft Report was submitted to EPA on April 1, 2003. On April 29, 2005, Asarco received EPA's finalized comments on the draft RFI. EPA has requested that responses to these comments and revisions to the appropriate sections of the RFI draft report be submitted within 60 days of the receipt of the finalized comments or no later than June 26, 2005. Additionally, EPA has requested that Asarco prepare a schedule for deliverables under the Phase II RFI and Risk Assessment Work Plan no later than May 20, 2005. Both the timelines are quite aggressive, particularly since limited resources must be shared between the two projects. Asarco will endeavor to meet the

proposed schedules but fully expects that additional time will be required to fulfill these obligations. Jon Nickel will regularly communicate with you on the timing for completions.

On February 3, 2005, Jon Nickel hand-delivered the Interim Measures Air Sparging Pilot Test Draft Summary Report to you. On April 28, 2005, Asarco received EPA's comments on the draft report. In May 2005, Asarco will be providing to EPA responses to these comments.

On April 4, 2005, Asarco provided responses to EPA comments relating to the arsenic speciation procedures and analyses methods being employed at the East Helena site. Asarco's responses addressed EPA's recommendations and proposed that an arsenic speciation stabilization study be conducted to evaluate standard stability, sample stability, and sample preservation. Asarco has completed the arsenic speciation stabilization study. The study results have recently been received from Energy Laboratory. Asarco will forward the results of the study to EPA in May 2005.

On April 27, 2005, Jon Nickel provided you with a letter that sets forth the schedule for conducting the semi-annual sampling of the designated monitoring wells and surface water sites and the annual sampling of residential groundwater wells as prescribed in Asarco's on-going Post Remedial Investigation (RI)/Feasibility Study (FS), Long Term Monitoring Program. The sampling of the designated monitoring wells and surface water sites is scheduled to take place during the weeks of May 9, 2005 and May 16, 2005. The annual sampling of the residential groundwater wells is scheduled to take place during the same general time frame but will be dependent upon the private well owner's availability.

A summary of the correspondence transmitted as part of the East Helena Consent Decree in April 2005 is included in Attachment 1.

- b. Identify any requirements under the Part VII of the Decree that were not completed in a timely manner, and problems or anticipated problem areas affecting compliance with the Decree;**

There were no requirements that were not completed in a timely manner nor were there problems or anticipated problem areas that affect compliance with the Decree.

- c. Describe projects completed during the prior month, as well as activities scheduled for the next month;**

In accordance with the March 2000 Groundwater Source Control Interim Measures Design Analysis, Plans, and Specification report, the speiss handling area and the former acid plant sediment drying area are being inspected monthly with the last inspection occurring on April 4, 2005. This monthly inspection

documented the condition of the interim measures. The inspection confirmed that all scheduled interim measures were in place.

Phase III Sparge Testing – On February 3, 2005, Jon Nickel hand-delivered the Interim Measures Air Sparge Pilot Test Draft Summary Report to you. On April 28, 2005, Asarco received EPA's comments on the draft report.

CAMU Landfill - The construction of the CAMU landfill is complete. The Final Construction Report for the CAMU-Phase 1 Cell was hand-delivered to EPA on January 23, 2002. In accordance with the July 2000 CAMU Design Analysis Report (Operation and Maintenance Plan), the CAMU is being inspected monthly with the last inspection occurring on April 8, 2005. This monthly inspection documented the condition of the CAMU.

RCRA Facility Investigation (RFI) - The Phase I RFI Site Characterization draft Report was submitted to EPA on April 1, 2003. On April 29, 2005, Asarco received EPA's finalized comments on the draft RFI.

During May 2005, Asarco is scheduled to conduct the semi-annual sampling of the designated monitoring wells and surface water site and the annual sampling of residential groundwater wells as prescribed in Asarco's on-going Post Remedial Investigation (RI)/Feasibility Study (FS), Long Term Monitoring Program.

d. Describe, and estimate the percentage of, studies completed;

The original bench-scale testing program for the Phase III air sparge test is 100% complete. The testing has been expanded to include additional column tests. The additional testing is 100% complete. The sparge pilot test program is 100% complete. The Interim Measures Air Sparging Pilot Test Summary Draft Report was submitted to EPA on February 3, 2005. On April 28, 2005, Asarco received EPA's comments on the draft report.

The RFI groundwater modeling is 100% complete. The results of this modeling exercise have been included in the Phase I RFI Site Characterization draft Report.

The Interim Measures Work Plan Addendum (May 2002) and responses to EPA's July 1, 2002 comments are 100% complete.

The implementation (field investigations) of the Interim Measures Work Plan Addendum (May 2002, and its revisions) is 100% complete.

e. Describe and summarize all findings to date;

The details of past findings through March 2005 are described and summarized in previous monthly progress reports.

f. Describe actions being taken to address problems;

There were no actions taken to address problems associated with the Decree.

g. Identify changes in key personnel during the period;

Asarco continues to use the services of Asarco Consulting Incorporated and Hydrometrics Incorporated to perform the various activities required under the Consent Decree. The Consent Decree activities will continue to be administrated under the direction of Robert Miller.

h. Include copies of the results of sampling and tests conducted and other data generated pursuant to work performed under Part VII of the Decree since the last Progress Report. Asarco may submit data that has been validated and confirmed by Asarco to supplement any prior submitted data. Updated validated and confirmed data shall be included with the RFI Report, if not delivered before;

One data validation package, entitled "Validation Summary, Asarco East Helena Interim Measures, East Helena Residential Groundwater, Inorganic Analyses, March 2005" is attached to this progress report.

i. Describe the status of financial assurance mechanisms, including whether any changes have occurred, or are expected to occur which might affect them, and the status of efforts to bring such mechanisms back into compliance with the requirements of this Decree.

ASARCO is still unable, at this time, to make the required financial assurance demonstration using the mechanisms outlined in the East Helena Consent Decree. However, EPA agreed in paragraph 36 of the subsequent national consent decree (U.S. v. ASARCO and Southern Peru Holdings Corp., No. CV 02-2079-PHX-RCB (entered February 3, 2003)) to forego penalties for any noncompliance with financial assurance requirements in RCRA or CERCLA consent decrees (such as the East Helena decree) in calendar years 2003-2005. (Paragraph 35 of the decree also forgoes penalties for past inability to demonstrate financial assurance from December 1997 to the entry of the Decree.) ASARCO continues to try and improve its financial position and hopes to be able to make the required financial assurance demonstration in the future.

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CERTIFICATION
PURSUANT TO U.S. v ASARCO INCORPORATED
(CV-98-3-H-CCL, USDC, D. Montana)

I certify under penalty of law that this document, April 2005 Progress Report and all attachments, were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Signature *D. E. McAllister*
Name: Douglas E. McAllister
Title: Vice President
Date: May 3, 2005

CONSENT DECREE
EAST HELENA SITE
APRIL 2005 PROGRESS REPORT

SUMMARY OF CORRESPONDENCE
ATTACHMENT 1

DATE OF TRANSMITTAL	CORRESPONDENCE SENT FROM	CORRESPONDENCE SENT TO	SUBJECT	RESPONSE
April 4, 2005	Doug McAllister	Linda Jacobson	Arsenic Speciation Method, Asarco Responses to EPA's Comments and Proposed Arsenic Speciation Stabilization Study	Asarco to Provide Results of Study
April 27, 2005	Jon Nickel	Linda Jacobson	Notification of Semi-Annual Long-Term Monitoring Program and Annual Residential Well Sampling	No Formal Response Required
Attached to This Progress Report	Doug McAllister	Linda Jacobson	Validation Summary Asarco East Helena Interim Measures East Helena Residential Groundwater Inorganic Analyses March 2005	No Formal Response Required

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VALIDATION SUMMARY
ASARCO EAST HELENA INTERIM MEASURES
EAST HELENA RESIDENTIAL GROUNDWATER
INORGANIC ANALYSES
MARCH 2005

Prepared for:
Mr. Jon Nickel
ASARCO Incorporated
PO Box 1230
East Helena, MT 59635

Prepared by:
Linda L. Tangen
6900 Cherry Blossom Lane
Albuquerque, NM 87111

May 2005

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LIST OF APPENDICES

APPENDIX 1: DATABASE

GLOSSARY OF TERMS

CLP	Contract Laboratory Program
COC	Chain of Custody
CRDL	Contract Required Detection Limit
DI	Deionized Water
DIS	Dissolved
DQO	Data Quality Objective
ELI	Energy Laboratories, Inc.
EPA	U.S. Environmental Protection Agency
IDL	Instrument Detection Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
NA	Not Applicable
PDLG	Project Detection Limit Goal
QC	Quality Control
RPD	Relative Percent Difference
SC	Specific Conductivity
TDS	Total Dissolved Solids

SUMMARY

East Helena residential well water (groundwater) samples were collected on March 16 and 31, 2005 for the ASARCO East Helena Facility Interim Measures Project. Inorganic constituents for these samples were validated using U.S. Environmental Protection Agency (EPA) guidelines for data validation (EPA 2002) and the project work plan (ASARCO 2002). Samples were analyzed by Energy Laboratories, Inc. (ELI) in Helena, Montana. The validated database is located in Appendix 1.

Data quality objectives for this project and the results for this sampling event were as follows:

- **Precision** is determined by field and laboratory duplicate sample results that are within control limits. The completeness objective for precision is 90% of the laboratory duplicate sample results within control limits. **This objective was met as 100% of the field and laboratory duplicate results were within control limits.**
- **Accuracy** is determined by laboratory control sample (LCS) and matrix spike (MS) sample results that are within control limits. The completeness objective for accuracy is 90% of the LCS and MS sample results within control limits. **This objective was met as 100% of the LCS (see the following note) and MS results were within control limits.**

***Note:** Due to the lack of LCSs for arsenic and sulfate analyses, initial calibration verification and continuing calibration verification standards were used to assess the accuracy for these analytes.

- **Completeness** is calculated by the number of valid (not rejected) data per number of planned data, expressed as a percentage. The completeness goal for this project was 90%. **This goal was met as 100% of the planned data were analyzed and deemed valid.**

All reported data for ASARCO Interim Measures' March 2005 sampling events are deemed valid and can be used for the purposes they were intended. Of the total number of analyses, 100% can be used without qualification.

DATA VALIDATION REPORT

1. INTRODUCTION

- This validation applies to analyses for four groundwater samples collected on 3/16/05 and 3/31/05 for the ASARCO East Helena Interim Measures project. Included in these samples was one field blank and one field duplicate.
- Validation procedures used are generally consistent with:
 - ☒ EPA Contract Laboratory Program (CLP) National Functional Guidelines for Inorganics Data Review (EPA 2002)
 - ☒ Work Plan – Interim Measures Work Plan Addendum (ASARCO 2002)
 - ☐ Other
- Overall level of validation:
 - ☐ CLP
 - ☒ Standard – Field and laboratory quality control (QC) samples are reviewed; and samples associated with QC violations are flagged.
 - ☐ Visual

2. DELIVERABLES

- All laboratory document deliverables were present as specified in the CLP-Statement of Work (EPA 2001), and/or the project contract.
 - ☒ Yes
 - ☐ No
- All documentation of field procedures was provided as required.
 - ☒ Yes
 - ☐ No

3. FIELD PROCEDURES

- All project required sites were visited.
 - ☒ Yes – see the notes on the following page
 - ☐ No

Project Site Notes: The following items were noted for this sampling event.

- Samples were not collected at 301 Gail and 109 Gail because the wells had been winterized.
- Samples were collected at 401 Gail on 3/16/05 and 3/31/05. This was due to a low-level dissolved arsenic detection in the sample collected 3/16/05. The field technician noted that the sample collected from backyard spigot on 3/16/05 was turbid. The homeowner stated that the plumbing for the spigot was old and rusty. Therefore, on 3/31/05, the site was re-sampled at the same spigot (backyard spigot) and from a second spigot located on the South side of the home. Dissolved arsenic was not detected in either sample or the field duplicate sample that was collected from the backyard spigot.
- Field parameters were measured in accordance with the project work plan.
☒ Yes
☐ No
- Field instruments were calibrated daily and before measurements were collected.
☒ Yes
☐ No
- Chains of Custodies (COCs) were properly filled out and signed by the field personnel.
☒ Yes
☐ No
- Data entry into field books, on COCs, and on sample labels were accurate and complete.
☒ Yes
☐ No

4. FIELD BLANKS

Blanks: Please note that the highest blank value associated with any particular analyte is the blank value used for the flagging process.

Deionized water (DI), trip, rinsate, or any other field blanks have been carried out at the proper frequency (one rinsate blank and one DI blank per event).

☒ Yes
☐ No

Reported results on the field blanks were less than the Project Detection Limit Goals (PDLGs).

☒ Yes
☐ No

5. FIELD DUPLICATES

Field duplicates have been collected at the proper frequency (one field duplicate per event).

☒ Yes
☐ No

Field duplicate relative percent differences (RPDs) were within the required control limits (RPD of 20% or less). If the sample or duplicate result is less or equal to five times the PDLG, the RPD criteria are not used. In these cases, the difference between the sample and the duplicate results must be within \pm the PDLG.

☒ Yes
☐ No

6. LABORATORY PROCEDURES

- **Laboratory procedures followed**

☒ CLP-Statement of Work (EPA 2001)
☒ SW-846 (EPA 1986)
☒ Methods for Chemical Analysis of Water and Wastes (EPA 1983)
☐ Other

- **Holding times met**

☒ Yes
☐ No

- **Consistency with project requirements**

Analyses were carried out as required by the project work plan (ASARCO 2002).

☒ Yes
☐ No

Project specified methods were used.

☒ Yes
☐ No

7. DETECTION LIMITS

- **Reporting detection limits met PDLGs.**

☒ Yes
☐ No

8. LABORATORY BLANKS

Please note that the highest blank value associated with any particular analyte is the blank value used for the flagging process.

- Method blanks were prepared and analyzed at the required frequency (one per batch or one per 20 samples, whichever is greater).

☒ Yes
☐ No

- All the analytes in the blank were less than the PDLG.

☒ Yes
☐ No

9. LABORATORY MATRIX SPIKES

- A MS sample (pre-digestion) was analyzed at the proper frequency (one per batch and/or matrix).

☐ Yes
☒ No – see notes

Notes: The following items were noted for this sampling event.

- Samples from an unknown source were used for sulfate matrix spikes for samples collected on 3/16/05 and 3/31/05. However, a matrix spike is not required for this analyte and the omission of the spike did not have an affect of the accuracy of sulfate results.
- A sample from an unknown source was used for the dissolved arsenic matrix spike for samples collected 3/31/05. Therefore dissolved arsenic could not be evaluated for inter-parameter interference for these samples.

- MS recoveries were within the required control limits (75-125%).

☒ Yes
☐ No

10. LABORATORY DUPLICATES

- Laboratory duplicate samples were analyzed at the proper frequency (one per batch or one per 20 samples, whichever is greater).

☒ Yes
☐ No

- RPDs were within the required control limits (RPD of 20% or less). If the sample or duplicate result is less or equal to five times the PDLG, the RPD criteria are not used. In these cases, the difference between the sample and the duplicate results must be within \pm the PDLG.

☒ Yes
☐ No

11. LABORATORY CONTROL STANDARDS

- The reference material used was of the correct matrix.

☒ Yes

☐ No

- Laboratory Control Samples (LCS) were prepared and analyzed at the proper frequency (one per batch or one per 20 samples, whichever is greater).

☐ Yes

☒ No – see notes

Notes: Specific LCS samples were not run for sulfate or dissolved arsenic. Therefore the Initial Calibration Verification (ICV) Standards and Continuing Calibration Verification (CCV) Standards were used to assess the accuracy of these analytes.

- LCS recoveries were within the required control limits (80-120% or certified range).

☒ Yes

☐ No

12. INTERPARAMETER COMPARISON

☐ Lab pH vs. field pH – see notes

☐ Lab Specific Conductivity (SC) vs. field SC – see notes

☒ Total Dissolved Solids (TDS) vs. SC

TDS vs. Lab SC: The ratio of TDS to field SC results should lie between 0.55 and 0.75. This ratio is intended to be a check on the accuracy of the TDS and lab SC measurements. In natural waters with high sulfate, the ratio may be much higher. This ratio is less accurate in dilute waters. TDS/SC ratios for this sampling event were from 0.50 and 0.55. Although some of these ratios were slightly low (less than 0.55), the TDS and SC results for the sites were line with historical data. Therefore no action was taken.

13. HISTORICAL COMPARISON SUMMARY

Data for this sampling event were compared with previous sampling events. All results were less than three standard deviations from the historical mean.

14. DATA QUALITY OBJECTIVES (DQOs)

- The data quality goal was met for precision (90% of the field and laboratory duplicates were within control limits).

☒ Yes –see the following table

☐ No

Precision Objectives

QC Type	Total Results	# of Results Out of Control Limits	# of Results Within Control Limits	% Within Control Limits
Field Duplicates	2*	0	2	100%
Lab Duplicates	22	0	22	100%

Overall	24	0	24	100%
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*Sulfate and TDS analyses are not requested for field duplicates. Therefore, field precision could not be measured for these analytes.

- The data quality goal was met for accuracy (90% of the LCS and matrix spike results were within control limits).
☒ Yes – see the table on the following page
☐ No

Accuracy Objectives

QC Type	Total Results	# of Results Out of Control Limits	# of Results Within Control Limits	% Within Control Limits
Matrix Spikes	7	0	7	100%
LCS*	16	0	16	100%
Overall	23	0	23	100%

*ICV and CCV results for arsenic and sulfate analyses were included.

- DQO target for completeness was met (the number of valid results divided by the number of possible results is 90% or above).
☒ Yes – see the following table
☐ No

Completeness

# of Planned Measurements	Actual # of Measurements	# of Rejected Measurements	# of Valid Measurements	Completeness
24	24	0	24	100%

- Samples were qualified for QC exceedances and deficiencies.
☒ Yes – see the following table
☐ No

Qualification of Samples

# of Measurements	# of Qualified Measurements	# Not Qualified	% Not Qualified
24	0	24	100%

15. CONCLUSION

All planned sites were sampled and the required number of measurements for these sites was analyzed and deemed valid for ASARCO Interim Measures' March 2005 sampling events. The data from these sites can be used for the purposes they were intended.

Data Validation Report by: Linda L. Tangen

Client Review by: Jon Nickel

REFERENCES

- ASARCO 2002. *Interim Measures Work Plan Addendum, East Helena Facility*. ASARCO Consulting Inc. Revised May.
- EPA 1983. *Methods for Chemical Analysis of Water and Wastes*. United States Environmental Protection Agency. March.
- EPA 1986. *Test Method for Evaluating Solid Waste: Physical/Chemical Methods 3rd Ed. 4 Vols.* United States Environmental Protection Agency. November.
- EPA 2001. *USEPA Contract Laboratory Program Statement of Work for Inorganics Analysis*. United States Environmental Protection Agency. Document Number ILM05.2. December.
- EPA 2002. *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*. United States Environmental Protection Agency. July.

APPENDIX 1
DATABASE

ASARCO, East Helena Plant

March 2005 Sampling Event

ANALYSES SUMMARY REPORT

C:\EnviroDataDB\Databases\V5_B_DB\EastHelena.mdb

Table of Contents by Station Type

<u>Page</u>	<u>Station Type</u>	<u>Station Name</u>
1	Domestic Wells	Gail203
2	Domestic Wells	Gail401
3	Field Quality Control	Field Blan

TOT: Total; DIS: Dissolved; TRC: Total Recoverable

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ASARCO, East Helena Plant

March 2005 Sampling Event

ANALYSES SUMMARY REPORT

C:\EnviroDataDB\Databases\V5_B_DB\EastHelena.mdb

Table of Contents By Lab Sample ID

<u>Page</u>	<u>Lab Sample ID</u>	<u>Sample ID</u>	<u>Sample Date</u>	<u>Station Name</u>
1	H05030118-001	EHR-0305-300	3/16/2005	Gail203
1	H05030118-002	EHR-0305-301	3/16/2005	Gail203
3	H05030118-003	EHR-0305-302	3/16/2005	Field Blan
2	H05030118-004	EHR-0305-303	3/16/2005	Gail401
2	H05040005-001	EHR-0305-304	3/31/2005	Gail401
2	H05040005-002	EHR-0305-305	3/31/2005	Gail401
2	H05040005-003	EHR-0305-306	3/31/2005	Gail401
3	H05040005-004	EHR-0305-307	3/31/2005	Field Blan

TOT: Total; DIS: Dissolved; TRC: Total Recoverable

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ASARCO, East Helena Plant

March 2005 Sampling Event

ANALYSES SUMMARY REPORT

C:\EnviroDataDB\Databases\V5_B_DB\EastHelena.mdb

Table of Contents by Sample ID

<u>Page</u>	<u>Sample ID</u>	<u>Lab Sample ID</u>	<u>Sample Date</u>	<u>Station Name</u>
1	EHR-0305-300	H05030118-001	3/16/2005	Gail203
1	EHR-0305-301	H05030118-002	3/16/2005	Gail203
3	EHR-0305-302	H05030118-003	3/16/2005	Field Blan
2	EHR-0305-303	H05030118-004	3/16/2005	Gail401
2	EHR-0305-304	H05040005-001	3/31/2005	Gail401
2	EHR-0305-305	H05040005-002	3/31/2005	Gail401
2	EHR-0305-306	H05040005-003	3/31/2005	Gail401
3	EHR-0305-307	H05040005-004	3/31/2005	Field Blan

TOT: Total; DIS: Dissolved; TRC: Total Recoverable

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ASARCO, East Helena Plant

March 2005 Sampling Event

ANALYSES SUMMARY REPORT

C:\EnviroDataDB\Databases\V5_B_DB\EastHelena.mdb

Sample Matrix	STATION	Gail203	Gail203
Water	SAMPLE DATE	3/16/2005	3/16/2005
	SAMPLE TIME	14:30	15:00
	LAB	ELI	ELI
	LAB NUMBER	H05030118-001	H05030118-002
	SAMPLE NUMBER	EHR-0305-300	EHR-0305-301
	TYPE	Domestic Wells	Domestic Wells
	GROUP	Private Wells	Private Wells
	DESCRIPTION		
	REMARKS		Field Duplicate

Common Ions (mg/L): unless noted

Sulfate (SO4) 50

Metals (mg/L): unless noted

Arsenic (As) (DIS) <0.002 <0.002

Physical/Fld-Lab: unless noted

pH (Fld) (TOT) 6.03
 SC (umhos/cm at 25 C) (Fld) (TOT) 364
 TDS (Measured at 180 C) 183

TOT: Total; DIS: Dissolved; TRC: Total Recoverable
 NOTE: Table 1 lists data validation flagging descriptions.

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ASARCO, East Helena Plant

March 2005 Sampling Event

ANALYSES SUMMARY REPORT

C:\EnviroDataDB\Databases\V5_B_DB\EastHelena.mdb

Sample Matrix	STATION	Gail401	Gail401	Gail401	Gail401
Water	SAMPLE DATE	3/16/2005	3/31/2005	3/31/2005	3/31/2005
	SAMPLE TIME	16:45	17:10	17:20	17:25
	LAB	ELI	ELI	ELI	ELI
	LAB NUMBER	H05030118-004	H05040005-001	H05040005-002	H05040005-003
	SAMPLE NUMBER	EHR-0305-303	EHR-0305-304	EHR-0305-305	EHR-0305-306
	TYPE	Domestic Wells	Domestic Wells	Domestic Wells	Domestic Wells
	GROUP	Private Wells	Private Wells	Private Wells	Private Wells
	DESCRIPTION	Backyard Spigot	So Side Spigot	Backyard Spigot	Backyard Spigot
	REMARKS				Field Duplicate

Common Ions (mg/L): unless noted

Sulfate (SO4)	218	222	194
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Metals (mg/L): unless noted

Arsenic (As) (DIS)	0.002	<0.002	<0.002	<0.002
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Physical/Fld-Lab: unless noted

pH (Fld) (TOT)	6.19	6.17	6.35
SC (umhos/cm at 25 C) (Fld) (TOT)	993	983	910
TDS (Measured at 180 C)	538	527	503

TOT: Total; DIS: Dissolved; TRC: Total Recoverable

NOTE: Table 1 lists data validation flagging descriptions.

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ASARCO, East Helena Plant March 2005 Sampling Event

ANALYSES SUMMARY REPORT

C:\EnviroDataDB\Databases\V5_B_DB\EastHelena.mdb

Sample Matrix	STATION	Field Blm	Field Blm
Water	SAMPLE DATE	3/16/2005	3/31/2005
	SAMPLE TIME	15:10	17:30
	LAB	ELI	ELI
	LAB NUMBER	H05030118-003	H05040005-004
	SAMPLE NUMBER	EHR-0305-302	EHR-0305-307
	TYPE	Field QC	Field QC
	GROUP	QC	QC
	DESCRIPTION		Backyard Spigot
	REMARKS	Blank	Blank

Metals (mg/L): unless noted

Arsenic (As) (DIS)	<0.002	<0.002
--------------------	--------	--------

TOT: Total; DIS: Dissolved; TRC: Total Recoverable
NOTE: Table 1 lists data validation flagging descriptions.

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